

CLAIMS

1. A method for managing radio resources for providing wireless access to a communication system to a number of terminals (130), wherein the communication system comprises a first access network (120) using a first access technology and at least one second access network (110) using at least one second access technology different from the first access technology, wherein the method comprises the step of receiving access relevant information from the first access network (120) and the at least one second access network (110),
10 characterized in that
the received access relevant information comprises information extracted from messages sent within the first access network (120); and in that
the method further comprises the steps of:
 - 15 comparing the received access relevant information extracted from messages sent within the first access network (120) to access relevant information received from the at least one second access network (110), and
determining which access network a terminal (130) should access based on at least the comparison of the received access relevant information extracted from messages sent within the first access network to the access relevant information received from the at least one second access network.
 - 20
- 25 2. The method according to claim 1 wherein the access relevant information is found by sniffing the messages sent within the first access network (120).
- 30 3. The method according to claims 1 or 2 wherein the first access network (120) is a wireless local area network.
4. The method according to any of claims 1-3 wherein at least part of the messages sent within the first access network (120) are messages sent between access points.
- 35 5. The method according to claim 4 wherein the at least part of the messages sent within the first access network (120) are defined by the Inter-Access Point Protocol (IAPP).

6. The method according to any of claims 1-5 wherein the access relevant information extracted comprises an identification of a terminal (130) and an identification of an access point that the terminal has associated with.

7. The method according to any of claims 1-3 wherein at least part of the access relevant information is extracted from user plane traffic for at least one terminal (130), which access relevant information is used to calculate traffic volume and/or throughput of the at least one terminal.

8. The method according to any of claims 1-3 wherein at least part of the messages sent within the first access network (120) are sent between access points and a router.

15 9. The method according to claim 8 wherein the at least part of the messages sent within the first access network (120) are defined by the Light Weight Access Point Protocol (LWAPP).

20 10. The method according to any of claims 1-3 wherein at least part of the messages sent within the first access network (120) are sent between at least one terminal and an access point.

25 11. The method according to any of claims 1-10 wherein at least part of the access relevant information extracted from messages sent within the first access network (120) indicates how frequently a channel was busy, which indicates load of the channel.

12. The method according to any of claims 1-11 wherein the method further comprises the step of:

30 converting the received access relevant information extracted from messages sent within the first access network (120) and/or the access relevant information received from the at least one second access network (110) to comparable quantities prior to the step of comparing the received access relevant information extracted from messages sent within the first access network to the access relevant information received from the at least one second access network.

13. A system for managing radio resources for providing wireless access to a communication system to a number of terminals (130), wherein the communication system comprises a first access network (120) using a first access technology and at least one second access network (110) using at least one second access technology different to the first access technology, **characterized in** that the system for managing radio resources comprises

5 at least one listening agent (202, 203) arranged for:

extracting access relevant information for at least the first access network (120)

10 (120) from messages sent within at least the first access network (120);

sending the access relevant information to an access selection manager (201),

15 an access selection manager (201) arranged for:

comparing the received access relevant information extracted from the first access network (120) to access relevant information received from the at least one second access network (110);

20 determining which of the first access network (120) and the at least one second access network (110) a terminal (130) should access based at least on the comparison of the access relevant information extracted from the first access network (120) to the access relevant information received from the at least one second access network (110).

14. The system according to claim 13 wherein the at least one listening agent (202, 203) is arranged for sniffing the messages sent within at least the first access network (120).

25

15. The system according to claim 13 or 14 wherein the first access network (120) is a wireless local area network.

30

16. The system according to any of claims 13-15 wherein at least part of the messages sent within the first access network (120) are messages sent between access points.

35

17. The system according to claim 16 wherein the at least part of the messages sent within the first access network (120) are defined by the Inter-Access Point Protocol (IAPP).

18. The system according to any of claims 13-17 wherein the access relevant information extracted comprises an identification of a terminal (130) and an identification of an access point that the terminal has associated with.

5 19. The system according to any of claims 13-15 wherein at least part of the access relevant information is extracted from user plane traffic for at least one terminal (130), which access relevant information is used to calculate traffic volume and/or throughput of the at least one terminal.

10 20. The system according to any of claims 13-15 wherein at least part of the messages sent within the first access network (120) are sent between access points and a router.

15 21. The system according to claim 20 wherein the at least part of the messages sent within the first access network (120) are defined by the Light Weight Access Point Protocol (LWAPP).

20 22. The system according to any of claims 13-15 wherein at least part of the messages sent within the first access network (120) are sent between at least one terminal and an access point.

25 23. The system according to any of claims 13-22 wherein at least part of the access relevant information extracted from messages sent within the first access network (120) indicates how frequently a channel was busy, which indicates load of the channel.

24. The system according to any of claims 13-23 wherein the access selection manager (201) is further arranged for:

30 converting the received access relevant information extracted from messages sent within the first access network (120) and/or the access relevant information received from the at least one second access network (110) to comparable quantities prior to comparing the received access relevant information extracted from messages sent within the first access network to the access relevant information received from the at least one second access network.

25. A listening agent (202, 203) for use in a system for managing radio resources for providing wireless access to a communication system to a number of terminals (130), wherein the communication system comprises a first access network (120) using a first access technology and at least one second access network (110) using at least 5 one second access technology different to the first access technology, **characterized in** that the listening agent (202, 203) is arranged for:

extracting access relevant information for at least the first access network from messages sent within at least the first access network;
sending the access relevant information to an access selection manager 10 (201).